Upgrading made simple.

Using technology derived from Garmin's highly successful G1000™ integrated avionics system, the new G600 and G500 suites bring a wealth of graphical flight capabilities to your cockpit retrofit.

The Garmin G500 is a lower-cost alternative, designed specifically for most Class 1/Class 2 aircraft (singles or twins under 6,000 lbs). The G600, which comes with a scaled version of Garmin's SVT as standard, is also approved for Class 1 and 2 aircraft – as well as for larger Class 3 piston and turbine aircraft between 6,000 lbs. and 12,500 lbs MTOW (see chart below)[1].

HOW THE UNITS COMPARE:	G500	G600
• Approved for Class 1 Aircraft (typically piston singles under 6,000 lbs.)	Yes	Yes
• Approved for Class 2 Aircraft (typically piston twins and turbine aircraft under 6,000 lbs.)	Yes	Yes
• Approved for Class 3 Aircraft (typically piston or turbine aircraft between 6,000 lbs. and 12,500 lbs)	No	Yes
• Software design assurance level	Level C	Level B
• Garmin SVT Synthetic Vision Technology	Optional	Standard
• GAD 43/43e replaces old A/P gyro attitude with AHRS references; GAD 43e adds additional interfaces with other avionics	Optional	Standard
• GWX 68/70 Radar interface (radar LRU sold separately)	Optional	Standard
• Interface support for other ARINC 708 radars	Optional	Optional
• RVSM capable on select aircraft	No	Optional
• Internal TAWS-B terrain alerting	No	Optional

[1]Check with your Garmin dealer for G600/G500 compatibility information.

Consolidating all primary flight, navigation and sensor data in a "big picture" suite of multi-tasking color LCDs, the G600/G500 systems' 10" wide bezels fit neatly into the panel space vacated by your standard six-pack of mechanical 3" flight instruments. In many cases, the existing airspeed indicator, artificial horizon and altimeter can be relocated to serve as standby instruments, adjacent to the G600/G500 flight display. Also, optional Garmin trim rings are available for the installation, enabling the existing instrument panel to be modified and re-used – thus affording a significant cost savings over an all-new panel. FAA Approved data for replacing most panels is also included with the G600/G500[1].

Within the display bezel itself, the large VGA-quality (640 x 480 pixel) screens offer brilliant color and crisp readability, even in direct sunlight, thanks to Garmin's advanced RGB backlight design.

The new SVT-capable PFD screen on the left shows attitude, airspeed, climb rate, altitude and course/heading information – while the right side MFD provides detailed moving-map graphics of the aircraft's current position in relation to ground features, chart data, navaids, flight plan routings, and more.

Dual LCD screens mounted side-by-side in a single bezel put Primary Flight Display (PFD) and Multi-Function Display (MFD) capabilities right in front of the pilot – bringing a whole new level of capability and situational awareness to the avionics retrofit market. SVT capability (if installed) is pilot selectable, and may be switched back to a more traditional blue-over-brown attitude display.

GDU 620 Display features
- Dual 6.5 inch diagonal color LCD
- RGB backlighting technology
- High resolution 640x480 VGA (921,600 RGB dots)
- 65,536 simultaneous colors
- Direct sunlight readable
- Auto, manual or lighting bus inputs for dimming

Physical - GDU 620 display
- 6.7 inches high
- 10.0 inches wide
- 3.25 inches deep
- 6.4 lbs.

System Architecture
- Position source: External GPS via RS-232
- GPS interface for Garmin GTN 750/650 series and GNS 400W/500W series
- Nav radio interfaces: GTN series, GNS 430W/530W/480 or SL30
- 8 bi-directional high speed RS-232 ports
- 2 bi-directional high speed RS-422/485 ports
- 8 ARINC 429 high/low speed inputs and 4 outputs
- ADF DC Sin/Cos input; XYZ synchro with optional GAD 43e
- Radar interface:
  - GWX 68 and GWX 70 (LRU sold separately)
    - Optional interface required for G500; standard interface included for G600
  - ARINC 708 support is optionally available for select GA radars
    - Optional interface required for G500 and G600
    - Check with your Garmin dealer for radar compatibility

- Autopilot interfaces
  - Heading/course error outputs
  - Analog lateral and vertical deviation outputs
  - ARINC 429 digital roll steering support
  - RS-485 digital altitude capture
  - Analog flight director input
  - Selected autopilot flight directors
- GAD 43 adapter (standard on G600; optional on G500) enables AHRS to drive select autopilot systems. Supports the following gyro emulation:
  - Approved gyro replacement for:
    - King KI-256 (or equivalent) used on KAP 100, KAP/KFC 150, KAP/KFC 200, KFC 225, and KFC 275
    - Collins 332D-11T used on select APS-65 installations
    - King KVG 350 used on KFC 250, KFC 300, KFC 275/325
    - Century 21, 31, 41, and 2000
- GAD 43e adapter provides the same autopilot compatibilities as the GAD 43, as well as the following functionality and compatibilities:
  - Altitude Preselector with Collins APS-65; KAP/KFC 150; KFC 275/325; S-TEC 55X, 60-2, 65, PSS, (KFC 200 expected Late Spring 2013)
  - Vertical Speed Controller with KAP/KFC 150; KFC 275/325; S-TEC 55X, 60-2, 65, PSS
  - Dual Analog VOR/LOC/GS Input*
  - Analog Radar Altitude Input*
  - DME Distance Input*
  - Marker Beacon Lamp Input*
  - Synchro ADF Input (ARINC 407)

*Tested with many third-party avionics, contact your dealer for specifics

Electrical
- 10-40 VDC, reverse polarity protected
- 55 watts typical

Environmental
- -20C to +55C operating temp
- -55C to +85C storage temp
- 2 degrees C per minute temp variation
- 95% at 50C humidity
- Display equipment tested to 55,000 feet max altitude
- internal cooling, external cooling not required

Certification Criteria
- STC via Approved Model List (AML) for nearly 800 airframes with G600 and nearly 600 airframes with G500
- G500 is approved for Class 1/Class 2 aircraft (under 6,000 lbs). G600 is approved for Class 1, Class 2 and Class 3 aircraft (including piston and turbine aircraft between 6,000 lbs and 12,500 lbs MTOW).
- TSO-C2d, TSO-C3d, TSO-C4c, TSO-C6d, TSO-C8d, TSO-C10b, TSO-C34e, TSO-C36e, TSO-C40c, TSO-C41d, TSO-C43c, TSO-C52b, TSO-C63c, TSO-C87, TSO-C113, TSO-C147, TSO-C151b (G600 only)

GARMIN

Garmin International, Inc.
1200 East 151st Street, Olathe, KS 66062
p: 913.397.8200 f: 913.397.8282

Garmin (Europe) Ltd., Liberty House, Hounsdown Business Park, Southampton, Hampshire, SO40 9RB, U.K.
p: 44.1794.519944 f: 44.1794.519222

Garmin Singapore Pte. Ltd., 46 East Coast Road #05-06, Singapore
p: 65.63480378 f:65.63480278

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GARMIN

G600 / G500

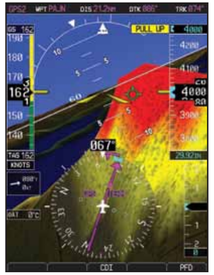
Now your glass cockpit retrofit options include Garmin SVT™ Synthetic Vision Technology.

At last, there's a way to bring the "glass cockpit" capabilities you've been wanting onboard the aircraft you already have: With Garmin's G600 or G500 retrofit flight display systems. Combine your choice of these affordable one-bezel units with your existing Garmin avionics stack, and – voila! – your old six-pack instrument layout is transformed into a state-of-the-art digital command center with AHRS attitude/heading reference and dual 6.5-inch LCD displays.

[Garmin flight displays with SVT™ capability bring a new perspective to cockpit retrofit.]

For faster scanning, both the Primary Flight Display (PFD) and Multifunction Display (MFD) are paired directly in your field of view. On the PFD, your attitude display is over 50% larger than those of traditional 3-inch flight instruments. And for added situational awareness, a scaled version of Garmin SVT™ Synthetic Vision Technology is now available (standard on the G600, optional on the G500) to create a 3-D "virtual reality" perspective view of flight and enroute terrain features.

It's a major advance in pilot workload reduction, safety and situational awareness. And it's Garmin's first certified retrofit package to make SVT available. So, if you love the idea of flying a digital glass cockpit – but hate to think of parting with your current aircraft – this is clearly the upgrade option you've been waiting for.



Terrain alerting with Garmin SVT is a real attention-getter. SVT is standard on G600; optional on G500. Potential terrain conflict areas are indicated by a color overlay on the topography: Yellow for caution. Red for WARNING.

When visibility is low, it's reassuring to have Garmin's Towers and Obstacles database looking out for non-terrain structural hazards. Color-coded 3-D symbols are depicted with SVT if there's a potential flight path conflict.

Using familiar TCAS/TAS/TIS symbology in a 3-D format, Garmin SVT makes it easier to spot moving traffic. You can see if they're above or below your altitude. And as intruders get closer, the symbols get larger.

Garmin SVT™ adds a new dimension.

The available SVT synthetic vision feature uses sophisticated graphics modeling to create a virtual topographic landscape from the G600/G500's terrain-alerting database. This enables the PFD to display a clear 3-D depiction of ground and water features, airports, obstacles and traffic – all shown in relative proximity to your aircraft. Instead of a flat blue-over-brown flight display, you'll see an in-depth perspective view of realistic terrain features rising into the sky. So, rather than looking at the PFD, you'll have a sense of looking through it – to "see" what lies beyond the nose of the aircraft. Fact is, the Garmin SVT presentation looks so real, it's almost like having a clear-day out-the-window view of your flight situation – even in solid IFR, nighttime VFR, or other low visibility conditions.

The AHRS advantage.

You can see that a lot of forward thinking went into the design of the new G600/G500 glass cockpit displays. But we didn't stop there. At every level of technology and system architecture, Garmin engineering has yielded game-changing advances in reliability, innovation and performance.

In place of less reliable gyro instruments, the system uses Garmin's proven GRS 77 Attitude and Heading Reference System (AHRS). The GRS 77 is the same AHRS installed in thousands of G1000-equipped aircraft, with accumulated flight hours in the millions. Using additional comparative inputs from GPS, magnetometer and air data computer, the Garmin AHRS achieves unprecedented levels of spatial-sensing precision and dependability. What's more, unlike some competitive attitude/heading sensors, it's even able to restart and fully realign itself while the aircraft is moving.

The G600/G500 can function as a selection hub for available navigation sensors on the aircraft. The unit will provide course deviation, vertical deviation, heading bug, course pointer and ARINC 429 GPS roll-steering information to select autopilots, as appropriate. In addition, if the autopilot does not support ARINC 429 roll steering, the G600/G500 can act like a roll steering converter via the heading input. Flight director display is supported for select autopilots. And with the GAD 43 adapter unit (standard on G600; optional on G500), an enhanced autopilot interface is available – allowing AHRS to drive your autopilot in place of a gyro-mechanical ADI (such as the familiar KI-256). The GAD 43 can emulate the many existing gyro interfaces, using far more reliable AHRS data to provide the required attitude, heading, yaw input, baro correction, and alerting information to the autopilot. This typically enables the system's costly ADI and/or other remote gyros to be replaced with a far more affordable (and space-saving) attitude indicator as one's backup instrumentation. You can also opt for the GAD 43e, which adds even more capabilities, including altitude preselector and vertical speed control for select autopilot systems, as well as DME distance, synchro ADF, analog radar altitude, analog VOR/LOC/Glideslope and marker beacon lamps right on the display. This allows the pilot to retain older avionics and sensors, while gaining the advantage of having these readouts displayed in their primary field of view.

To further simplify the system interface for retrofit, the aircraft's existing fuel gauges and engine monitoring displays are also retained – while navigation inputs can be provided by Garmin's touchscreen-controlled GTN 750/650 series of avionics (sold separately), as well as by WAAS-enabled versions of the popular GNS 430W/530W or 480 systems (also sold separately). Likewise, VOR/Localizer/Glideslope inputs can be provided by Garmin's Slimline SL30 TSO'd nav/comm transceiver.

Databases, datalinks, data-everything.

By referencing built-in terrain and mapping databases, the Garmin G600/G500 MFD provides a clear, concise picture of where you are and where you're heading.

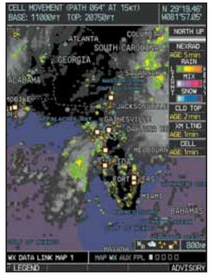
At a glance the Garmin basemap helps identify cities, roads, rivers, lakes, and other ground features along your flight path. Added safety is provided by a built-in terrain elevation database that uses color coding to alert you as you approach rising terrain. (Class B TAWS alerting is also available as an option with the G600 only.) On the ground, built-in Garmin SafeTaxi™ airport diagrams help pilots navigate U.S., Canadian and European airports with confidence – as their aircraft's exact location is graphically highlighted on the field. Worldwide airport directory data is also available with each new unit, offering FBO listings and fuel/service information on up to 8,000 airports around the globe. In addition, Garmin FliteCharts®, which feature electronic versions of AeroNav terminal procedures charts for U.S. airports, come standard and pre-installed[1]. Or, as an alternative, pilots can select Jeppesen JeppView™ instrument approach plates and airport surface charts for the G600/G500 (with optional Garmin ChartView™ and Jeppesen JeppView™ subscription). ChartView has the ability to overlay a geo-referenced aircraft symbol on the electronic approach chart, providing a visual crosscheck of your progress inbound. Then, when you land, ChartView can display the destination airport's surface diagram.

Front-loading SD card slots on the G600/G500 bezel make updating of charts and software a simple plug-in procedure. What's more, for data access beyond the cockpit itself, it's easy to combine the G600/G500 with a variety of optional sensors and data links. For example, to help keep an eye on other transponder-equipped planes in your vicinity, you can access Traffic Information Service (TIS) alerts on your G600/G500, simply by adding a GTX 330 Mode S transponder. Or, you can select from available TAS and TCAS I systems such as Garmin's GTS 800/820/850 series.

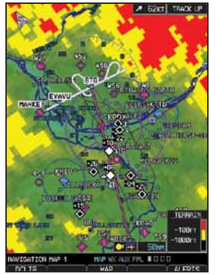
Want digital on-board weather radar capability? Just add Garmin's versatile GWX 68 or the Doppler-capable GWX 70. (Optional interface available on G500; standard interface included for the G600. GWX 68/70 radars sold separately.) ARINC 708 interface support for other popular GA radars is also optionally available on both the G600 and G500 – including configurations for the Bendix/King RDR series ART 2000 (or compatible) antenna/receiver/transmitter units, as well as the RS-181A and RS-811A sensors used on the RDS 81/82 series. As an even more affordable weather solution, you can opt for Garmin's GDL 69/69A™ data link receiver, which provides graphical U.S. weather alerting via Sirius XM™ Satellite Radio. (subscription required.) With this option, graphical depictions of NEXRAD weather, METARs, TAFs, TFRs, winds aloft, echo tops, surface precipitation, lightning strikes, storm cell data, and more, can be received and displayed anywhere in the U.S., regardless of altitude. You can pan and zoom in on weather anywhere in the country. Or even extend the NEXRAD screen range out to 2,000 nm for nationwide monitoring of current weather. What's more, for the best in enroute entertainment, there's also a user interface offering over 170 channels of Sirius XM digital audio programming, when installed with the GDL 69A receiver (subscription required).

If you're flying globally – or at least operating beyond the U.S. continental limits – you can still have access to quality on-demand satellite weather data and radar imagery in a fast-growing number of regions throughout the world, via Garmin's GSR 56 Iridium network transceiver (subscription required). In addition to worldwide weather coverage, the Garmin Iridium transceiver can also provide you with enroute voice calling, email and text messaging for global connectivity wherever you fly.

Other useful G600/G500 options and capabilities include an ARINC 429 interface to enable display of radar altimeter readouts on the pilot's PFD (radar altimeter sold separately). For select aircraft installations, an RVSM compliance kit is also optionally available on the G600 system – allowing qualified airframes to comply with Reduced Vertical Separation Minimums criteria for full access to the more restricted flight levels in RVSM airspace. Finally, to augment the multimedia talents of your G500 or G600 system, there's even a video input option that allows your MFD screen to function as an EVS or live-cam video monitor. You've never seen so much built-in growth capability in a glass cockpit system this affordable.



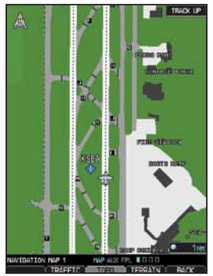
Weather datalink capability, via XM™ WX Satellite Weather service, can provide color NEXRAD, METARs, TAFs, lightning, and other U.S. data displays.



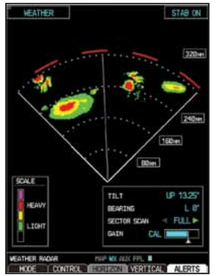
With its built-in elevation database, the G600/G500 system provides an extra margin of safety in visualizing terrain/obstacle conflict situations. Audible terrain alerts are supported with optional TAWS-B (G600 only).

It all makes sense.

With Supplemental Type Certification provided under an Approved Model List (AML)[2], standardized retrofit installation of the G600/G500 in your aircraft is simple and straightforward. The unit neatly fits into the "six-pack" slot in your instrument panel – and connects through your plane's existing electrical system. So, you could be flying behind that great-looking Garmin glass even sooner than you expected. Better still, you'll be flying with the confidence and peace-of-mind that comes with our award-winning Garmin Product Support. To find out more about the futuristic flight capabilities available now with a G600/G500 retrofit, just give your Garmin dealer a call. Or visit our website at www.garmin.com.



Helpful Garmin SafeTaxi™ airport diagrams identify runways, taxiways and hangars, as well as your aircraft location on field.



With 6,500 watts of magnetron muscle, Garmin's GWX 68 digital color radar (sold separately) can provide an extra measure of onboard weather protection. The radar interface is included with the G600 system; and is optional for the G500.

FEATURES AT A GLANCE

- Dual 6.5-inch diagonal color LCD displays; portrait orientation
- Large and clear display fonts
- 4.8-inch diagonal attitude indicator
- SVT synthetic vision renders terrain-alerting data into realistic virtual landscape (optional on G500)
- Proven solid-state Attitude and Heading Reference System (AHRS) and Air Data Computer (ADC)
- Real-time winds aloft data on PFD
- XM WX Satellite Weather and XM Radio (optional)
- Iridium-based worldwide datalink weather (optional)
- Built-in terrain elevation and towers/obstacles databases
- Standard FliteCharts®, SafeTaxi® and AOPA Airport Directory
- Optional ChartView™ shows the aircraft position on the Jeppesen approach charts and airport surface diagrams
- Offers control/display for available GWX 68/70 airborne weather radar
- Optional ARINC 708 interface support for select GA radar units
- Displays GPS mapping, as well as optional traffic, terrain and datalink systems
- Flight director for selected autopilots
- Optional TAWS-B alerting (G600 only)
- Optional RVSM compliance kit (G600 only)
- Interface support for optional radar altimeter display on PFD
- GAD 43/43e adapters provide AHRS reference for autopilot interface on select models (allows replacement of gyro attitude, yaw, and baro correction; radar stabilization; and bootstrap heading) – optional on G500. GAD 43e provides all the AHRS functions of the GAD 43, plus additional analog interfaces that allow you to keep more of your existing avionics.
- Supports optional video monitor input on MFD display

[1] *Included U.S. FliteCharts® will disable when data is over 6 months out-of-date. Updates available on single-cycle or annual basis.*

[2] *Ask your dealer for AML status*